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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



In re application of:

Dane K. FISHER *et al.*

Appl. No. 09/540,235

Filed: April 3, 2000

For: **Nucleic Acid Sequences from
Cyanidium caldarium and Uses
Thereof**

Art Unit: 1631

Examiner: HARTTER, A.

Atty. Docket: 38-21(15749)B

10/A
Plunkett
2/24/02

Amendment and Reply Under 37 C.F.R. § 1.111

Commissioner for Patents
Washington, D.C. 20231

Attn: Box Non-Fee Amendment

Sir:

In response to the Office Action mailed November 6, 2001, (PTO Prosecution File Wrapper Paper No. 9), Applicants submit the following Amendment and Remarks.

It is not believed that extensions of time are required beyond those that may otherwise be provided for in documents accompanying this paper. However, if additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required therefor (including fees for net addition of claims) are hereby authorized to be charged to Deposit Account No. 13-4125, referencing docket number 38-21(15749)B.

Amendments

Please amend the application as follows:

In the Specification

Please amend the specification as follows:

Please replace the paragraph beginning at page 7, line 13, and ending on page 7, line 22, with the following paragraph:

A1
Similarity analysis includes database search and alignment. Examples of public databases include the DNA Database of Japan (DDBJ)(www.ddbj.nig.ac.jp/); Genbank (www.ncbi.nlm.nih.gov/web/Genbank/Index.html); and the European Molecular Biology Laboratory Nucleic Acid Sequence Database (EMBL) (www.ebi.ac.uk/ebi_docs/embl_db.html). A number of different search algorithms have been developed, one example of which are the suite of programs referred to as BLAST programs. There are five implementations of BLAST, three designed for nucleotide sequences queries (BLASTN, BLASTX, and TBLASTX) and two designed for protein sequence queries (BLASTP and TBLASTN) (Coulson, *Trends in Biotechnology*, 12:76-80 (1994); Birren, *et al.*, *Genome Analysis*, 1:543-559 (1997), all of which are incorporated by reference in their entirety).

Please replace the paragraph beginning at page 35, line 10, and ending on page 35, line 18, with the following paragraph:

A2
Exogenous genetic material may be transferred into a plant cell by the use of a DNA vector or construct designed for such a purpose. Vectors have been engineered for transformation of large DNA inserts into plant genomes. Binary bacterial artificial chromosomes have been designed to replicate in both *E. coli* and *A. tumefaciens* and have all of the features required for transferring large inserts of DNA into plant chromosomes (Choi